LISTING OF THE CLAIMS

The following listing, if entered, replaces all prior versions of the claims in the present application.

1. (Previously Presented) A method comprising:

receiving a request to read a portion of data from first data storage, wherein the request is received by a receiving module of a first host, the first host can access the first data storage, and the first host cannot access second data storage;

requesting a requested portion of a copy of the data in the second data storage from a second host that can access the second data storage;

receiving the requested portion from the second host; and

reading the portion of the data by

reading the requested portion received from the second host, and

when a sub-portion of the portion of the data is not included in the requested portion received from the second host, reading the sub-portion from the first data storage.

2. (Original) The method of claim 1 further comprising:

determining that a second portion of the data in the first data storage is unavailable;

creating a third data storage upon performing the determining, wherein the first host can access the third data storage; and

causing each subsequent change to the data in the first data storage to be written to the third data storage.

3. (Previously Presented) The method of claim 2 wherein

when the portion of the data comprises an updated portion in the third data storage, the reading the portion of the data comprises reading the updated portion from the third data storage.

4. (Original) The method of claim 2 wherein

the second portion of the data is unavailable because the second portion of the data is corrupted.

5. (Original) The method of claim 2 wherein

the second portion of the data is unavailable because a device of the first data storage is unavailable.

6. (Original) The method of claim 2 further comprising:

replicating data in the third data storage to fourth data storage accessible by the second host, wherein the fourth data storage cannot be accessed by the first host.

7. (Original) The method of claim 1 wherein

the copy of the data in the second data storage was copied from a previous version of the data in the first data storage at a previous point in time.

8. (Original) The method of claim 1 wherein

the data in the second data storage is a log of changes made to data in the first data storage after a previous point in time; and

the requested portion is a set of changes in the log of changes, wherein

each change in the set of changes comprises a change to the portion of the data, wherein the change was made after the previous point in time.

9. (Original) The method of claim 1 wherein the requesting the requested portion comprises:

identifying a set of changed regions of a first plurality of regions of the first data storage using a set of indicators, wherein

each indicator of the set indicates whether at least one change was made to data in a respective region of the first data storage, and;

adding each region of the set of changed regions to the requested portion.

10. (Previously Presented) The method of claim 9 further comprising:

determining whether the data in each region of the first plurality of regions of the first data storage is synchronized with the copy of the data in a corresponding region of a second plurality of regions of the second data storage; and

when the data in one region of the first plurality of regions is not synchronized with the copy of the data in the corresponding region of the second plurality of regions,

identifying a set of unsynchronized regions of the first data storage, wherein each region in the set of unsynchronized regions is unsynchronized with a corresponding region of the second data storage, and

forcing replication of the data in the set of unsynchronized regions to the copy of the data in the second data storage prior to requesting the requested portion.

11. (Previously Presented) The method of claim 10 wherein the determining whether the data in each region of the first data storage is synchronized with the copy of the data in the corresponding region of the second data storage comprises

determining whether a lag in replication from the first data storage to the second data storage exists, and

when the lag exists, determining that the first data storage and the second data storage are unsynchronized.

12. (Previously Presented) The method of claim 11 wherein the determining whether the lag in replication from the first data storage to the second data storage exists comprises:

examining a replication map for the first data storage, wherein the replication map comprises an indicator for each region of the first plurality of regions, the indicator for each region indicates whether data in a respective region of the first data storage have changed but have not yet been replicated; and

when at least one respective region of the first plurality of regions has the indicator, determining that the lag exists.

13. (Previously Presented) A system comprising:

first receiving means of a first host for receiving a request to read a portion of data from first data storage, wherein the first host can access the first data storage, and the first host cannot access second data storage;

requesting means for requesting a requested portion of a copy of the data in the second data storage from a second host that can access the second data storage;

second receiving means for receiving the requested portion from the second host; and

reading means for reading the portion of the data by

reading the requested portion received from the second host, and

when a sub-portion of the portion of the data is not included in the requested portion received from the second host, reading the sub-portion from the first data storage.

14. (Original) The system of claim 13 further comprising:

determining means for determining that a second portion of the data in the first data storage is unavailable;

creating means for creating a third data storage upon performing the determining, wherein the first host can access the third data storage; and

causing means for causing each subsequent change to the data in the first data storage to be written to the third data storage.

15. (Original) The system of claim 14 further comprising:

second reading means for reading an updated portion from the third data storage if the portion of the data comprises the updated portion.

16. (Previously Presented) A system comprising:

a first receiving module of a first host to receive a request to read a portion of data from first data storage, wherein the first host can access the first data storage, and the first host cannot access second data storage;

a requesting module to request a requested portion of a copy of the data in the second data storage from a second host that can access the second data storage;

a second receiving module to receive the requested portion from the second host; and

a reading module to read the portion of the data by

reading the requested portion received from the second host, and

when a sub-portion of the portion of the data is not included in the requested portion received from the second host, reading the sub-portion from the first data storage.

17. (Original) The system of claim 16 further comprising:

a determining module to determine that a second portion of the data in the first data storage is unavailable;

a creating module to create a third data storage upon performing the determining, wherein the first host can access the third data storage; and

a causing module to cause each subsequent change to the data in the first data storage to be written to the third data storage.

18. (Original) The system of claim 17 further comprising:

a second reading module to read an updated portion from the third data storage if the portion of the data comprises the updated portion.

19. (Previously Presented) A computer-readable medium comprising:

first receiving instructions to receive a request to read a portion of data from first data storage, wherein a first host can access the first data storage, and the first host cannot access second data storage;

requesting instructions to request a requested portion of a copy of the data in the second data storage from a second host that can access the second data storage;

second receiving instructions to receive the requested portion from the second host; and

reading instructions to read the portion of the data by

reading the requested portion received from the second host, and

when a sub-portion of the portion of the data is not included in the requested portion received from the second host, reading the sub-portion from the first data storage.

20. (Previously Presented) The computer-readable medium of claim 19 further comprising:

determining instructions to determine that a second portion of the data in the first data storage is unavailable;

creating instructions to create a third data storage upon performing the determining, wherein the first host can access the third data storage; and

causing instructions to cause each subsequent change to the data in the first data storage to be written to the third data storage.

21. (Original) The computer-readable medium of claim 20 further comprising:

second reading instructions to read an updated portion from the third data storage if the portion of the data comprises the updated portion.